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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/921,286      | 08/02/2001  | Wolfgang Buerger     | GT/83A              | 5322             |

7590                    03/12/2003

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[REDACTED] EXAMINER

RUTHKOSKY, MARK

[REDACTED] ART UNIT      [REDACTED] PAPER NUMBER

1745

DATE MAILED: 03/12/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                            |                             |
|------------------------------|----------------------------|-----------------------------|
| <b>Office Action Summary</b> | Application No.            | Applicant(s)                |
|                              | 09/921,286                 | BUERGER ET AL.<br><i>BS</i> |
|                              | Examiner<br>Mark Ruthkosky | Art Unit<br>1745            |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 January 2002.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 26 November 2001 is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed 1/28/2002 has been placed in the application file, and the information referred to therein has been considered as to the merits.

### ***Drawings***

2. The drawings, filed on 11/26/2001 have been approved by the examiner.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, and 5-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Burger et al. (WP 99/16138.)

The instant claims are to an electrochemical energy storage device comprising at least two electrodes and an electrolyte, and a carrier material for the electrolyte disposed between the electrodes. The carrier material comprises a porous material having inner pores in which a perfluorinated polyether phosphate is present.

Burger et al. (W) 99/16138) teaches an electrochemical energy storage device comprising at least two electrodes and an electrolyte, and a carrier material for the electrolyte disposed

between the electrodes (see claims 1-21.) The carrier material comprises a porous material having inner pores in which a perfluorinated-polyether phosphate is present (see Table 1, MF 201 for a perfluorinated-polyether phosphate.) The porous material is shown to be PTFE. Nanoscale ceramics, including phosphates, are noted in the last paragraph of page 12. The device is disclosed to be a capacitor and may have a base as the electrolyte (page 2, lines 3-10 and page 4, line29-page 5 end.) Thus, the claims are anticipated.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burger et al. (WP 99/16138.)

The teachings of Burger et al. (WP 99/16138) have been presented. The device is disclosed to have a base as the electrolyte. Burger et al. (WP 99/16138) does not teach the base electrolyte to be KOH. The reference is silent to specific electrolytes. It would be obvious to one of ordinary skill in the art at the time the invention was made to use KOH as a base electrolyte as it is broadly known to be used as a basic electrolyte in electrochemical devices. As Burger et al. (WP 99/16138) teaches the device to have a base electrolyte, one of ordinary skill would understand that the base, KOH, would be a useful electrolyte to transfer charge.

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7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burger et al. (WP 99/16138) as previously applied, in view of Hiroshi (EP 718,903.)

The teachings of Burger et al. (WP 99/16138) have been presented. Burger et al. (WP 99/16138) does not teach the electrochemical device to be a fuel cell. Hiroshi (EP 718,903) teaches a fuel cell incorporating a membrane in which a porous membrane material is coated with a resin that may include sulfonic acid functional groups (see the examples.) The membrane is used between two electrodes to transfer charges as in the instant application. It would be obvious to one of ordinary skill in the art at the time the invention was made to use the membrane of Burger et al. (WP 99/16138) in an electrical device such as a fuel cell as one of ordinary skill in the art would recognize that the material may be applied to transfer charge between the electrodes of a fuel cell as taught in Hiroshi (EP 718,903.) As the Burger et al. (WP 99/16138) reference teaches the membrane may be used in a variety of electrochemical energy storage devices, one of ordinary skill would expect ionic transfer using the membrane in a fuel cell.

*Examiner Correspondence*

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1193. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 703-305-0587. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:00.) If attempts to reach

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the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 703-308-2383.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Mark Ruthkosky

Patent Examiner

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3/1/03